Online Resource 1: Longitudinal Simulator-Enhanced Point-of-Care Ultrasound Training for First-Year Medical Students

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Modified Ultrasound Competency Assessment Tool

RUQ/LUQ/or pelvis scan for free fluid (complete only 1 then move on)

Domain		**Performance Rating**					**Total**
		<50% of the categories	**=> 50% of the categories**	**100% of the categories**			
Preparation	Patient & Sonographer Positioning						
	Probe selection						
	Appropriate clinical indication						
	Initial settings (depth, pre-sets)						
Image Acquisition	Hand & probe position						
	Identify appropriate landmarks						
	Thorough visualization of target/area of interest						
	Efficiency of probe motion						
	Troubleshoots technical limitations						
Image Optimization	Centers area of interest						
	Overall image quality for interpretation						
	Troubleshoots patient obstacles						
	Optimizes machine settings (gain, depth, frequency)						
Documentation	Appropriate interpretation/documentation						
Entrustment		*I had to do*	*I had to talk them through*	*I had to prompt from time to time*	*I needed to be there just in case*	*I did not need to be thee*	
Total							

Fig. S1 Modified Ultrasound Competency Assessment Tool used for the practical assessment

Exploratory Sentiment Analysis

As an exploratory, post hoc supplementary analysis, sentiment polarity scores suggested more positive written feedback among simulator-enhanced students (Fig. S2). The simulator-enhanced group showed a higher median polarity (approximately 0.30) than the standard-curriculum group (approximately 0.22), with responses more tightly clustered in the positive range. The standard-curriculum group showed greater variability and a larger proportion of near-neutral responses. We interpret this descriptive analysis as supportive rather than confirmatory.

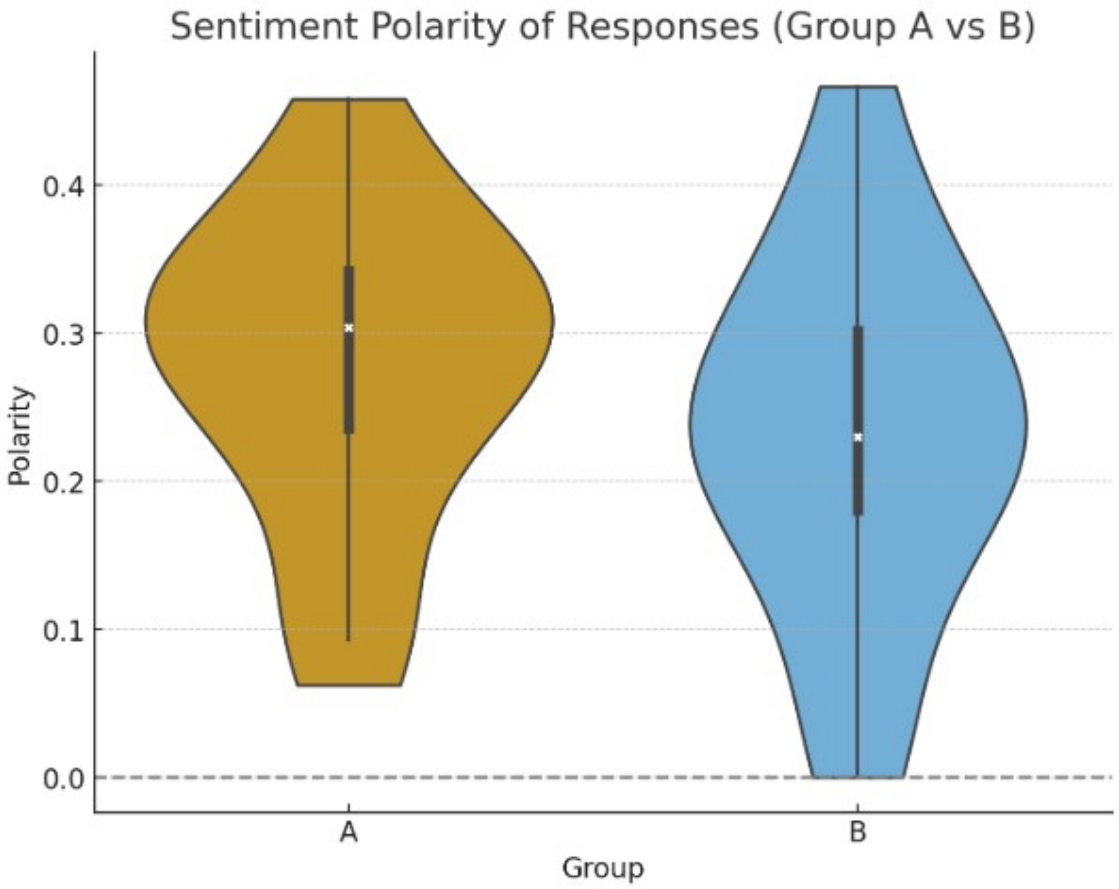


Fig. S2 Sentiment polarity of qualitative survey responses. Group A represents the simulator-enhanced group and Group B the standard-curriculum group. Polarity scores reflect overall positivity in written reflections